Notice of Allowability	Application No.	Applicant(s)	
	09/589,464	BOODAGHIANS, SAMSON	
	Examiner	Art Unit	
	Toan D. Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *5/23/05*.

2. ☒ The allowed claim(s) is/are *12-13, 15, 20, 31-34, 39-41, 43-44, 47-52, 61-62, 65-66, 77-80 are renumbered 1-27, respectively*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☒ to Paper No./Mail Date *4*.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *5/23/05* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Examiner Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Henry Brendzel on May 24, 2005.

2. The application has been amended as follows:

IN THE CLAIMS:

In claim 15 line 3, delete " traffic trunk;" and insert --- traffic trunk by means of an in-band network management packet; ---.

In claim 20 line 3, delete " traffic trunk;" and insert --- traffic trunk by means of an in-band network management packet; ---.

In claim 31 line 6, delete "a label edge router." and insert --- a label edge router, and the received packet is a loopback in-band network management packet. ---.

In claim 32 line 7, delete "label switching router." and insert --- label switching router, and the received packet is a loopback in-band network management packet. ---.

In claim 34 line 7, delete "label switching network." and insert --- label switching network, and the received packet is a loopback in-band network management packet. ---.

In claim 39 line 7, delete "network." and insert --- network, and the received packet is a loopback in-band network management packet. ---.

In claim 43 line 10, delete "label switching router." and insert --- label switching router, and the received packet is a loopback in-band network management packet. ---.

In claim 47 line 10, delete "directional traffic trunk." and insert --- directional traffic trunk, and wherein the processing circuitry determines whether the received packet is a loopback in-band network management packet and whether the label switching router is a loopback label switching router for the received loopback in-band network management packet. --- .

In claim 50 line 8, delete "forwarding entries." and insert --- forwarding entries wherein the processing circuitry determines whether the received packet is a loopback in-band network management packet and whether the label switching router is a loopback label switching router for the received loopback in-band network management packet. ---.

In claim 52 line 8, delete "label switching network." and insert --- label switching network, and wherein the processing circuitry determines whether the received packet is a loopback in-band network management packet and whether the label switching router is a loopback label switching router for the received loopback in-band network management packet. ---.

In claim 61 line 11, delete "an intermediate router." and insert --- an intermediate router, and the received packet is a loopback in-band network management packet. ---.

In claim 62 line 10, delete "label switching network." and insert --- label switching network, and the received packet is a loopback in-band network management packet. ---.

In claim 65 line 17, delete "the received packet." and insert --- the received packet, and the received packet is a loopback in-band network management packet. ---.

In claim 77 line 10, delete "an intermediate router." and insert --- an intermediate router, and wherein the received packet is a loopback in-band network management packet. ---.

In claim 78 line 8, delete "label switching network." and insert --- label switching network, and the received packet is a loopback in-band network management packet. ---.

In claim 80 line 3, delete "traffic trunk" and insert --- traffic trunk by means of an in-band network management packet; ---.

Claims 53 and 54 have been cancelled.

The above examiner's amendment was made to clarify the claims.

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance:

Regarding claim 12, the prior art fails to teach a combination of the steps of:

wherein the step of activating a loopback procedure at a label switching router further includes a step of transmitting an in-band network management packet that contains a command for activating the loopback procedure, in the specific combination as recited in the claim.

Regarding claim 13, the prior art fails to teach a combination of the steps of:

wherein the step of activating a loopback procedure at a label switching router further includes a step of transmitting an in-band network command to the label-switching router instructing the label switching router to activate the loopback procedure, in the specific combination as recited in the claim.

Regarding claims 15 and 80, the prior art fails to teach a combination of the steps of:

performing a loopback function on the established bi-directional traffic trunk by means of an in-band network management packet, in the specific combination as recited in the claims.

Regarding claim 20, the prior art fails to teach a combination of the steps of:

performing a loopback function on the activated bi-directional traffic trunk by means of an in-band network management packet, in the specific combination as recited in the claim.

Regarding claim 31, the prior art fails to teach a combination of the steps of:

wherein the originating router is a label edge router, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Regarding claim 32, the prior art fails to teach a combination of the steps of:

wherein the loopback router is at least one of a label edge router and an intermediate label switching router, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Regarding claims 34, 39 and 78, the prior art fails to teach a combination of the steps of:

wherein the bi-directional traffic trunk is in a multi-protocol label switching network, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claims.

Regarding claim 43, the prior art fails to teach a combination of the steps of:

wherein the bi-directional traffic trunk is in a multi-protocol label switching network, and wherein the step of receiving a packet further includes receiving the packet at a label switching router, and the receiving label switching router is any one of a label edge router and an intermediate label switching router, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Regarding claims 47, 50 and 52, the prior art fails to teach a combination of the steps of:

wherein the processing circuitry determines whether the received packet is a loopback in-band network management packet and whether the label switching router is a loopback label switching router for the received loopback in-band network management packet, in the specific combination as recited in the claims.

Regarding claim 61, the prior art fails to teach a combination of the steps of:

wherein the router constructing the packet and the router receiving the packet are label switching routers and wherein the router constructing the packet is an edge router and the router receiving the packet is any one of an edge router and an

intermediate router, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Regarding claim 62, the prior art fails to teach a combination of the steps of:

wherein the router constructing the packet and the router receiving the packet are label switching routers and wherein the routers are in multi-protocol label switching network, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Regarding claim 65, the prior art fails to teach a combination of the steps of:

the step of determining whether to perform a loopback procedure further includes a step of determining whether the router receiving the packet is a loopback router for the received packet, and the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Regarding claim 77, the prior art fails to teach a combination of the steps of:

wherein the originating label switching routers is an edge router and the receiving router is any one of an edge router and an intermediate router, and wherein the received packet is a loopback in-band network management packet, in the specific combination as recited in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
TN

MAN U. PHAN
PRIMARY EXAMINER